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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/394,327	09/13/1999	YUTAKA SAWAYAMA	48212-CIP	4070

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EDWARDS & ANGELL, LLP  
P.O. BOX 9169  
BOSTON, MA 02209

EXAMINER

PARKER, KENNETH

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/394,327	SAWAYAMA ET AL.
Examiner	Art Unit	
Kenneth A Parker	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 01 April 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-57 is/are pending in the application.

4a) Of the above claim(s) 18-33 and 35-57 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-15, 17 and 34 is/are rejected.

7)  Claim(s) 16 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## **Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17,19 . 6)  Other: \_\_\_\_\_ .

## DETAILED ACTION

### ***Specification***

The abstract of the disclosure is objected to because it is over 150 words.

Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What is a "front diffuser" cannot be determined. For examining purposes, it is assumed that any diffuser is a front diffuser.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4, 6-7, 12-13, 17, 34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nakabayashi et al 6379017**

Nakabayashi et al discloses a front illuminating device with a light source 1, a light 203 directing body functioning as claimed with a light incident surface and opposite releasing surfaces, and a second light releasing surface formed into a step shape with slanting portions for reflecting light mainly from the light source toward the first light releasing surface as claimed. There are prisms on both bodies, and as the prisms are linear they will be anisotropically diffusing (the prisms will inherently defuse some of the light associated with the prisms, and therefore linearly, or "anisotropically". The layers 205, 332, 361 can be construed as the second body, and include an antireflecting layer applied to the top surface of the LCD.

**Claims 1-4, 6, 8, 12, 14-15, 17, 34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bao et al, US Patent #6,266108**

Bao et al discloses a front illuminating device with a light source, a light directing body 20 functioning as claimed with a light incident surface and opposite releasing surfaces, and a second light releasing surface formed into a step shape with slanting portions 22 for reflecting light mainly from the light source toward the first light releasing surface as claimed. Bao discloses an index matching adhesive 40, which can, in accordance with applicant's use, be the second body, as can bodies 70 and 80.

**Claims 1-4, 9-11, 17, 34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tai et al US Patent 6092904.**

Tai et al discloses a front illuminating device with a light source, a light directing body functioning as claimed with a light incident surface and opposite releasing surfaces, and a second light releasing surface formed into a step shape with slanting portions for reflecting light mainly from the light source toward the first light releasing surface as claimed. There are prisms on both bodies, and as the prisms are linear they will be anisotropically diffusing (the prisms will inherently defuse some of the light associated with the prisms, and therefore linearly, or "anisotropically"). The collimator 38 can also be construed as the second body.

***Claim Rejections - 35 USC § 103***

**Claims 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bao et al, US Patent #6,266108.**

Bao et al lacks a diffuser between the top elements (as the second body). As the use of a top diffuser was a well known functionally equivalent alternative to the bottom reflector being diffusive. Therefore one of ordinary skill would have been motivated to use such a diffuser for diffusing the light as it was well known to be equally suitable for the intended purpose yet lower cost.

Also lacking from disclosure is the device as an integral unit. It was judicially determined that making intergral was within the ordinary skill level, and here it would have been obvious so the elements remain attached and aligned.

**Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tai et al US Patent 6092904**

Also lacking from disclosure is the device as an integral unit. It was judicially determined that making intergral was within the ordinary skill level, and here it would have been obvious so the elements remain attached and aligned.

**Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabayashi et al 6379017**

Also lacking from disclosure is the device as an integral unit. It was judicially determined that making intergral was within the ordinary skill level, and here it would have been obvious so the elements remain attached and aligned.

***Allowable Subject Matter***

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The reason for the indication of allowable subject matter is the matching between the claimed functional elements.

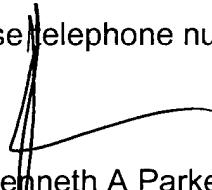
***Response to Arguments***

Applicant's arguments were persuasive regarding the antireflection layer (as the location was not on the device front) except where it was explicitly taught. Additionally, the Tai reference applied previously was not a front lit device, so the reference has been changed to a new Tai reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 703-305-6202. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L. Sikes can be reached on 308-4842. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Kenneth A Parker  
Primary Examiner  
Art Unit 2871

June 1, 2003